ABSTRACT OF THE DISCLOSURE

In a method and medical device for determining the coordinates of images of marks in a volume dataset, the marks are disposed on the surface of a subject, and the volume dataset represents the images of the marks and an image of at least the part of the subject on whose surface the marks are disposed. A data processing system stores the volume dataset. The volume dataset is picked up by a first imaging medical device and represents an image of at least a part of the subject on whose surface several marks disposed and images of the marks. With a navigation system, a relation of the coordinates of the volume dataset to the coordinates of the subject is provided in the form of a coordinate transformation during a registration.